Listing of Claims:

1. - 11. (canceled)

12. (Previously Presented) A method of monitoring a rotation rate sensor having a vibration gyro which represents a bandpass filter and is part of at least one control loop having digital and analog components, the vibration gyro being excited by an excitation signal at a natural frequency of the vibration gyro supplied by said at least one control loop, said method comprising the steps of:

tapping an output signal from the vibration gyro, the excitation signal and a rotation rate signal being derived from the output signal by filtering and amplification;

measuring analog signals of the analog components;

reading characteristic values within the digital components; and

comparing the characteristic values and the analog signals to limit values using redundant analog components and at least one redundant analog/digital converter.

13. (Previously Presented) The method of claim 12, further comprising the steps of modulating the excitation signal with a modulation signal component whose frequency produces sidebands which are located within a pass band of a bandpass filter and are outside the frequency range of the rotation rate signal; measuring the amplitude of the modulation signal in the output signal; and emitting a fault message if the amplitude of the modulation signal is less than a predetermined threshold value.

14. (Currently Amended) The method of claim 13, further comprising the steps of:

demodulating the output signal, after amplification and analog/digital conversion, into an in-phase component and a quadrature component[[,]];

modulating the in-phase component and the quadrature component after filtering; combining the modulated in-phase and quadrature components to form the excitation signal; and

adding a modulation signal component to each of the in-phase component and the quadrature component before said step of modulating.

15. (Previously Presented) The method of claim 14, further comprising the steps of taking measurement signals from the taking in-phase and quadrature components before the addition of the modulation signal component, and synchronously demodulating the measurement signals.

16. (Previously Presented) The method of claim 15, wherein said step of taking measurement signals comprises tapping off measurement signals before and after filtering of the in-phase and quadrature components.

17. (Previously Presented) The method of claim 15, further comprising the step of integrating the synchronously demodulated measurement signals over a predetermined time, and comparing a value of the integral with the predetermined threshold value.

18. (Previously Presented) The method of claim 15, further comprising the step of integrating the synchronously demodulated measurement signals, and measuring the time which the integrated measurement signals take to reach a predetermined threshold value.

19. (Previously Presented) The method of claim 13, wherein the modulation signal component has a frequency of about 200 Hz.

20. (Currently Amended) The method of claim 12, further comprising the steps of generating a first rotation rate signal that is an output of the rotation rate sensor and a second rotation rate signal that is supplied to output stages of the rotation rate sensor, reading the first and second rotation rate signals, and comparing the first and second rate ~~sensors~~ signals for fault determination.

21. (Previously Presented) The method of claim 12, further comprising the step of sending, by a system which is connected to the output, the rotation rate signal to an input of the system for checking.

22. (Previously Presented) The method of claim 12, wherein the digital and analog components are continuously checked by checking components, and monitoring components monitor the checking components at least once during one operating cycle.